

FIGURE 1

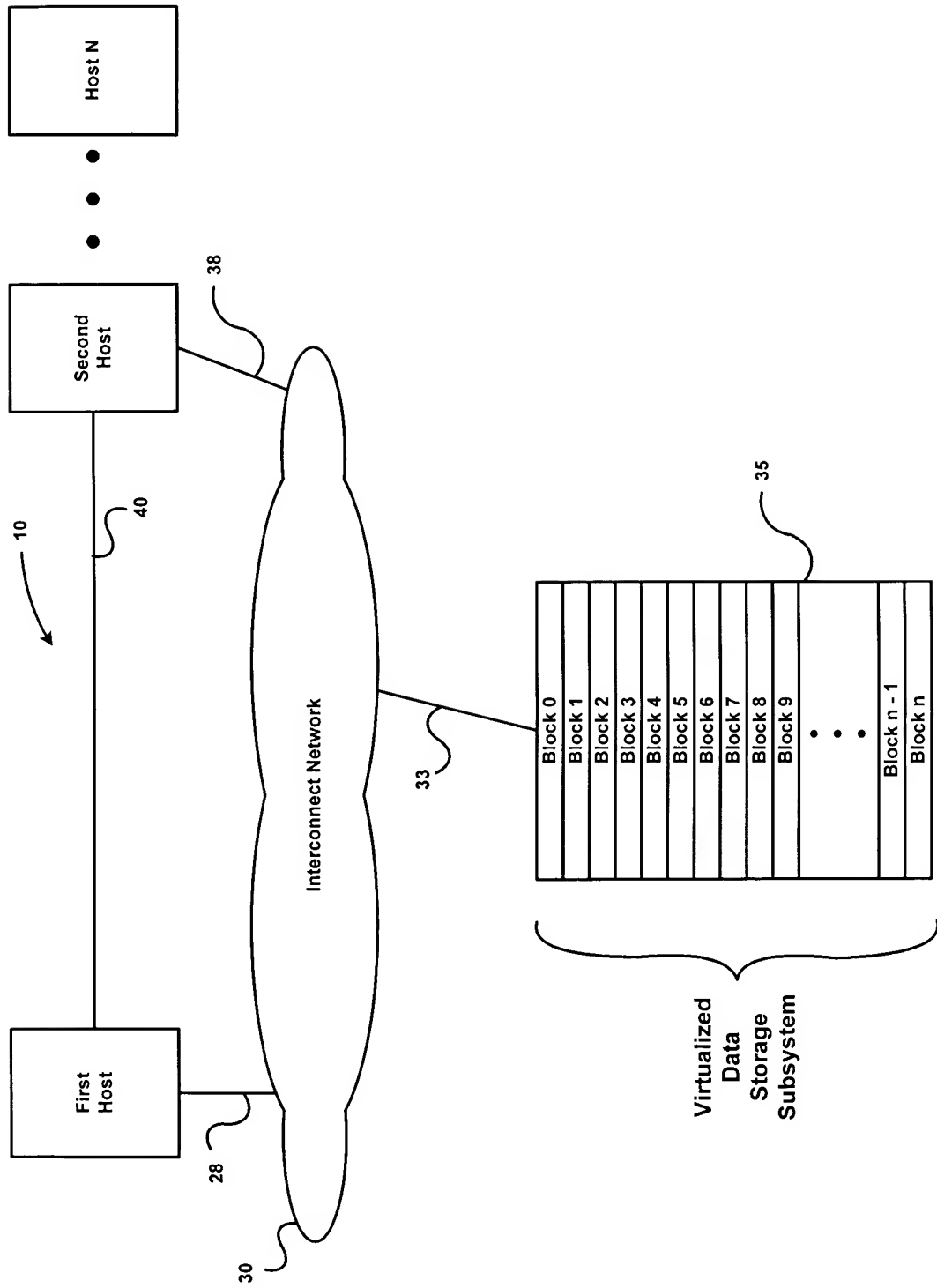


FIGURE 2

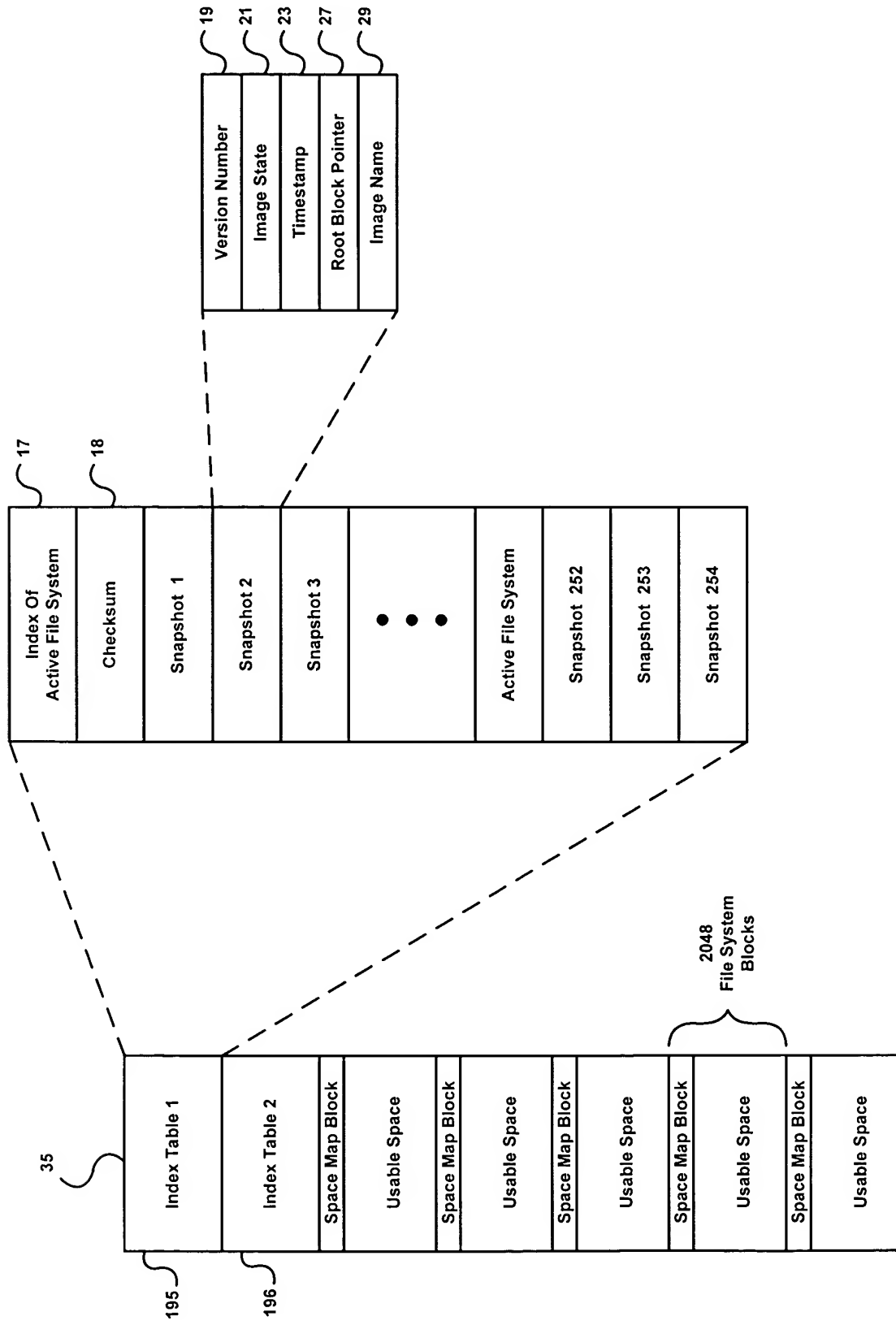


FIGURE 3

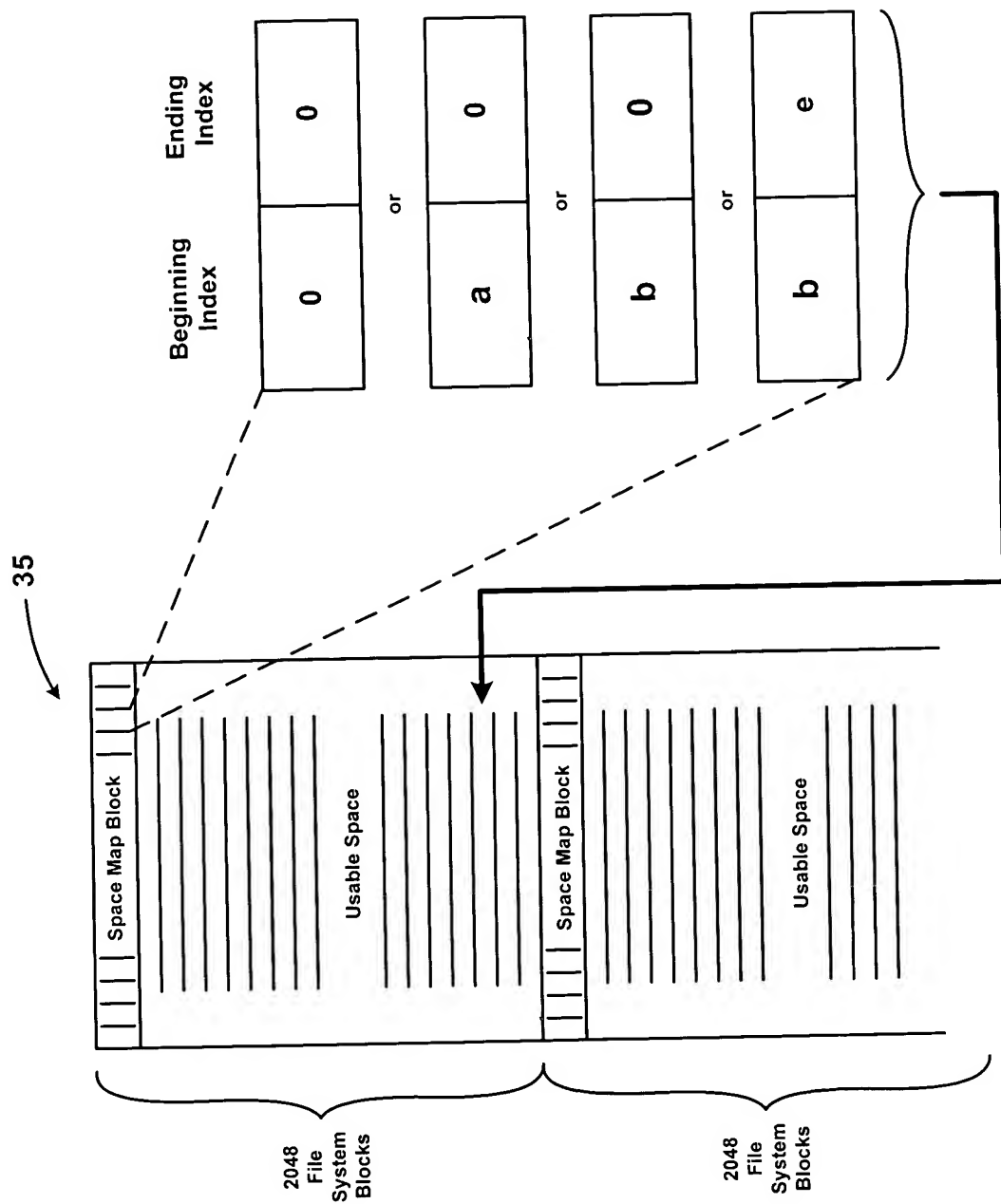


FIGURE 4

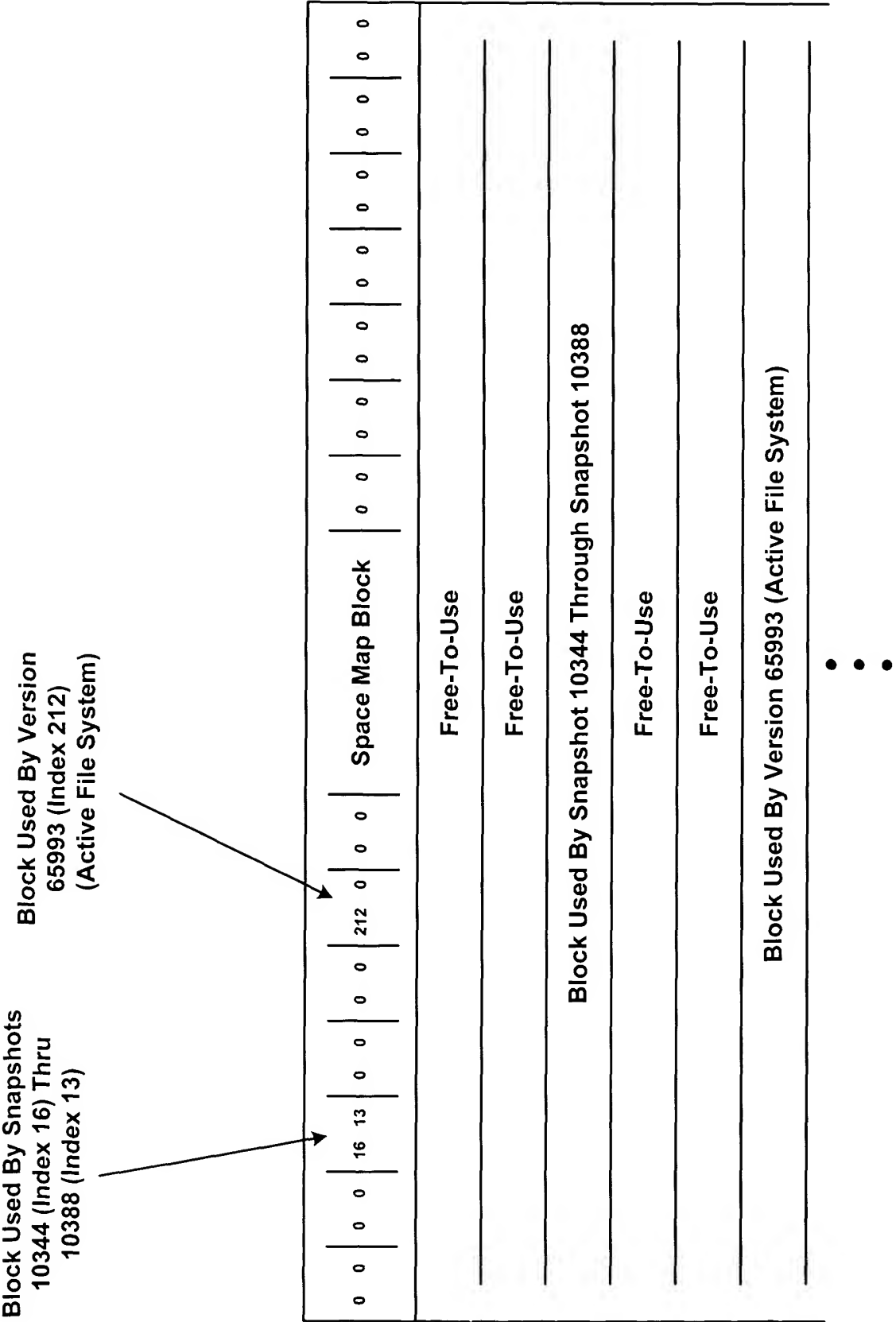


FIGURE 5

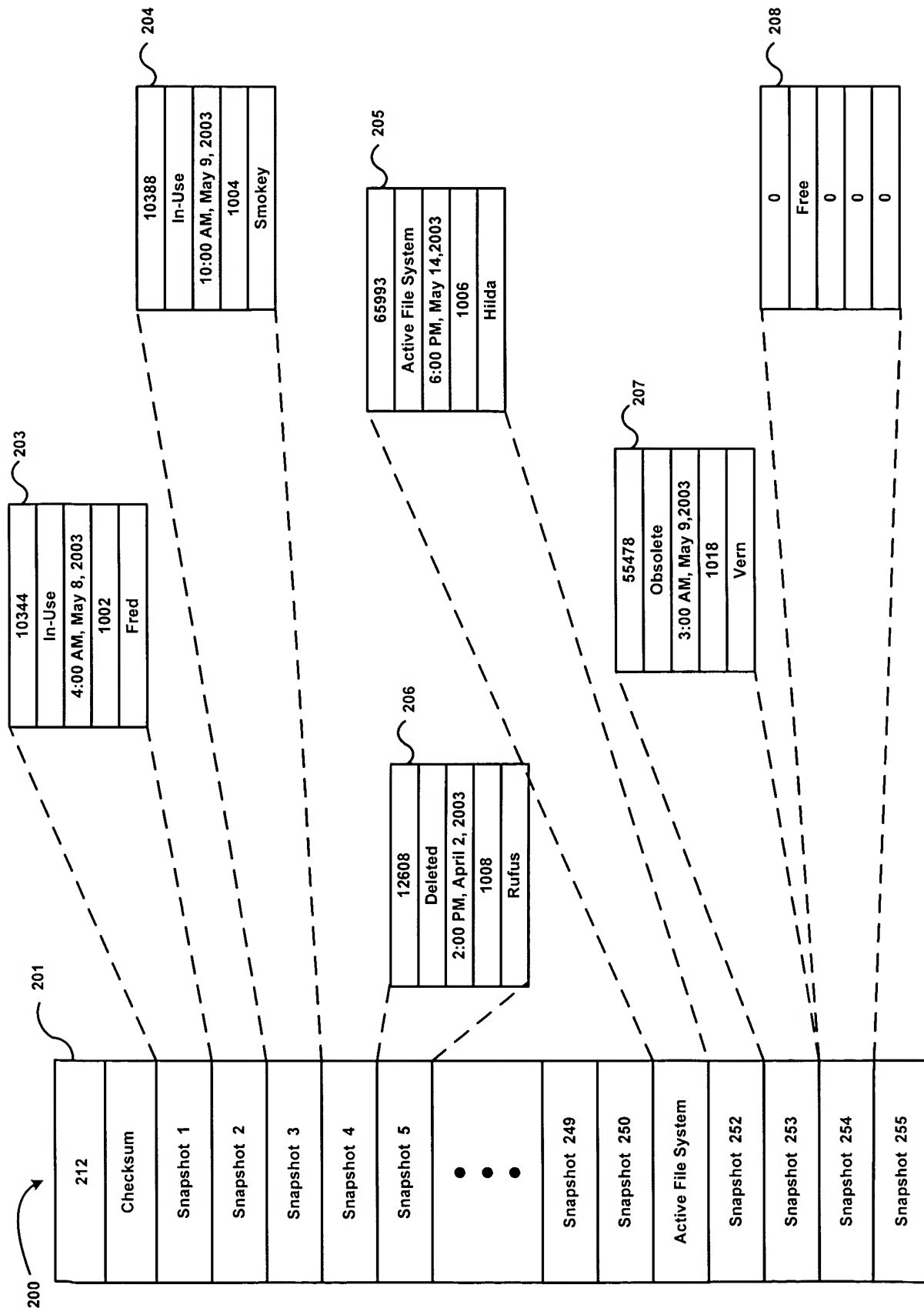


FIGURE 6

## Create A File System

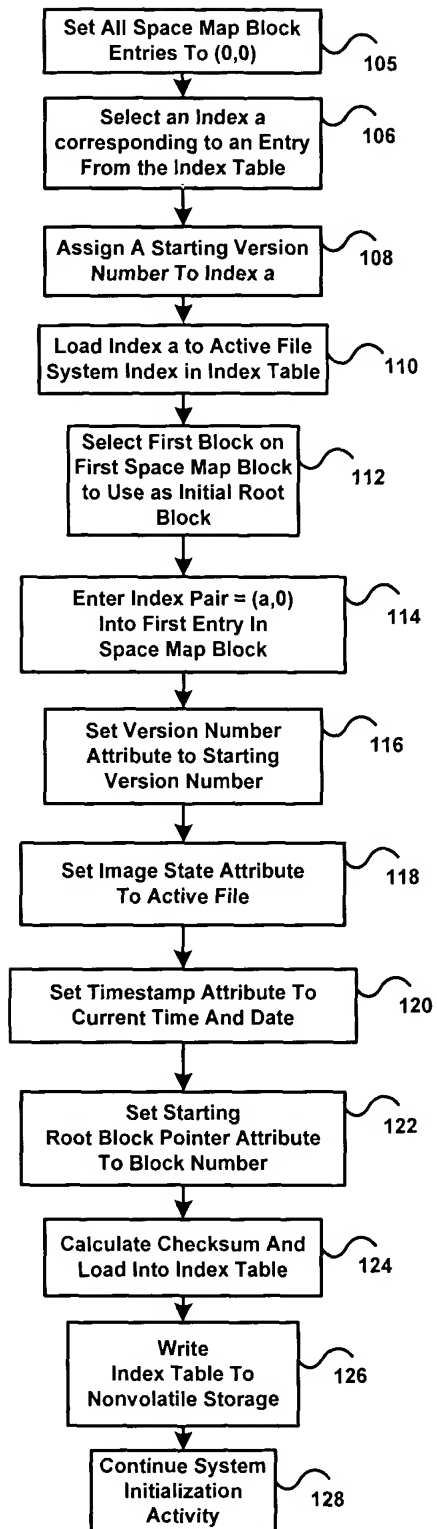


FIGURE 7

## Block Management

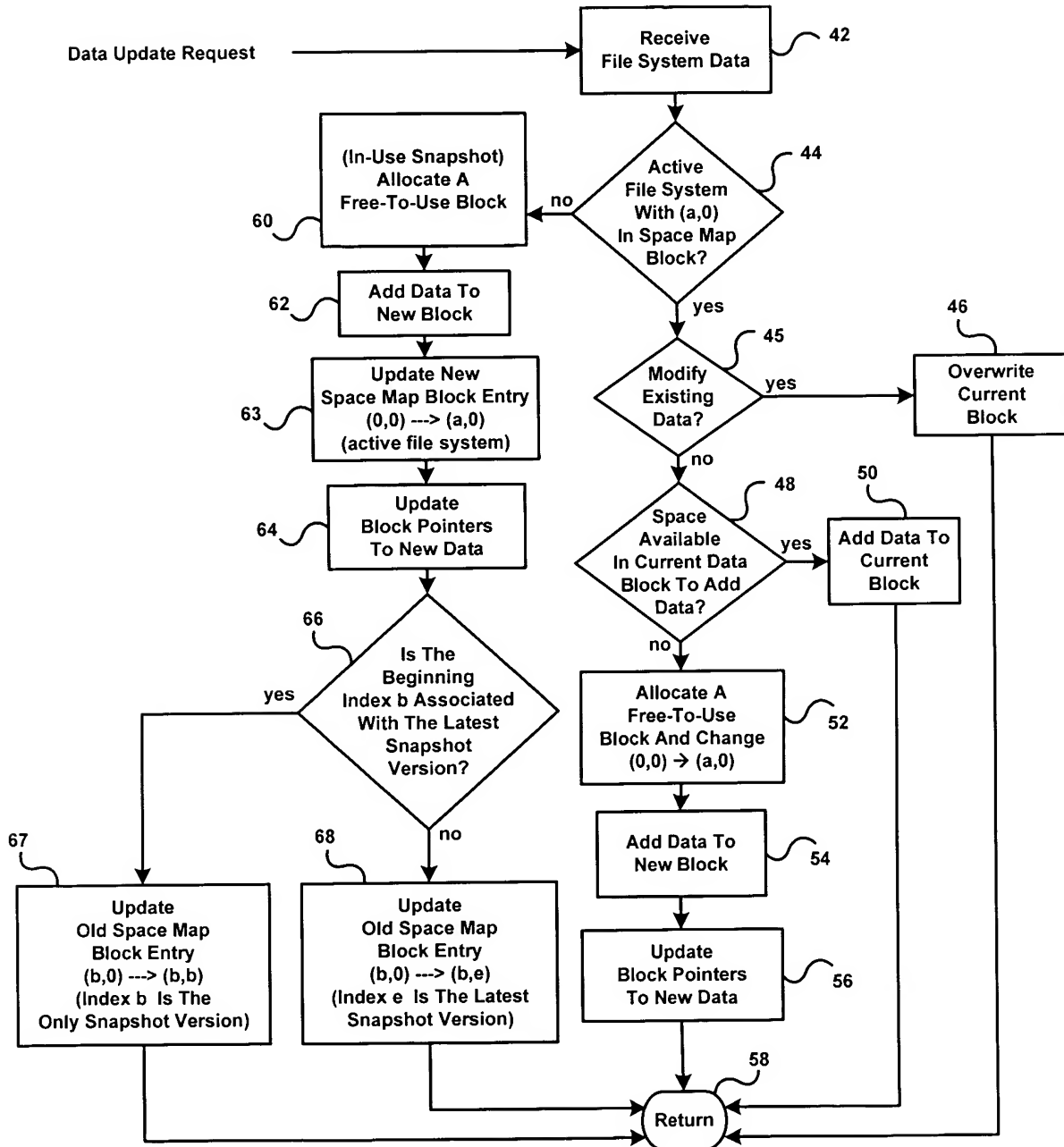


FIGURE 8



## Create A File System Snapshot

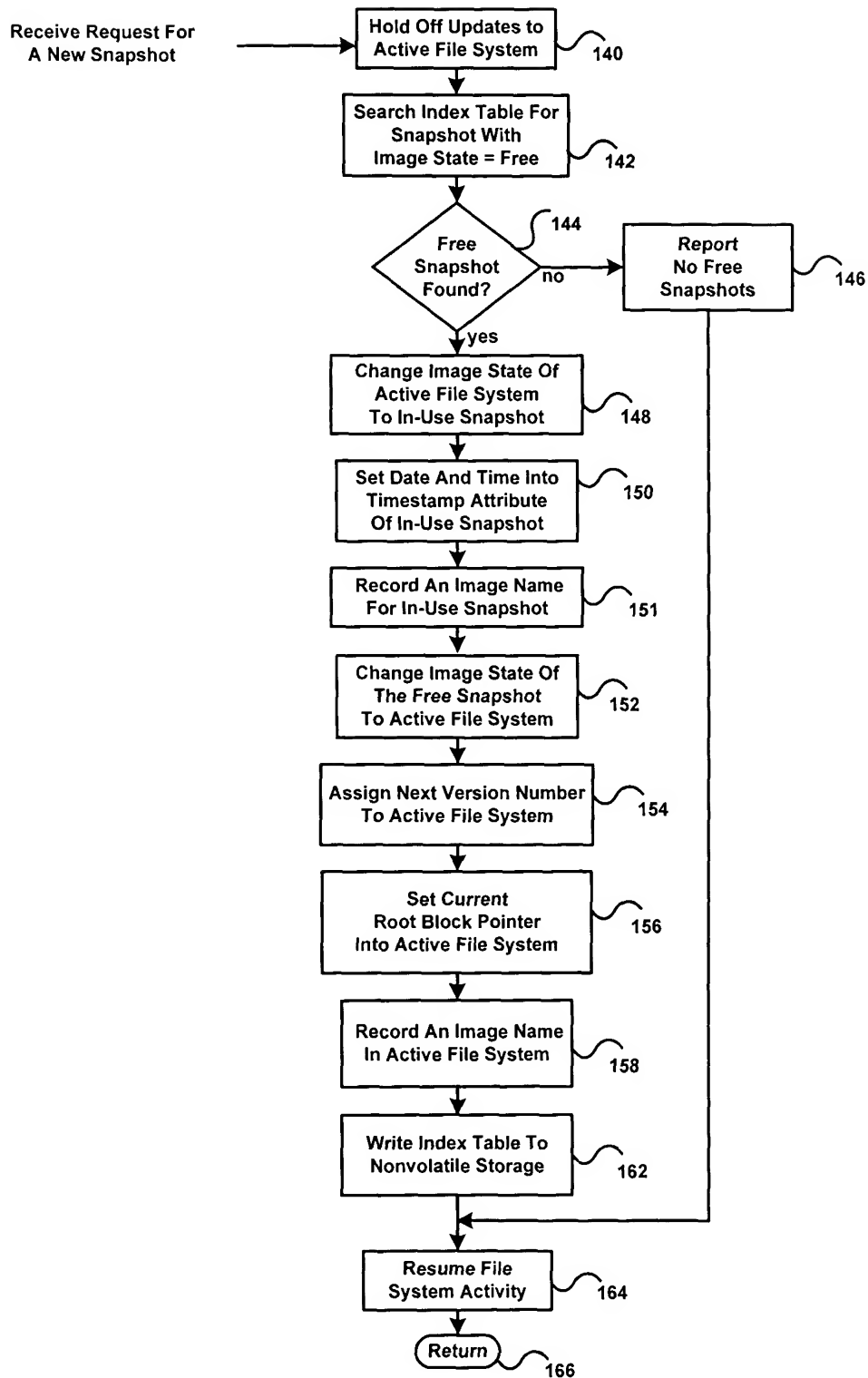


FIGURE 9

## Revert To An Earlier Snapshot Version

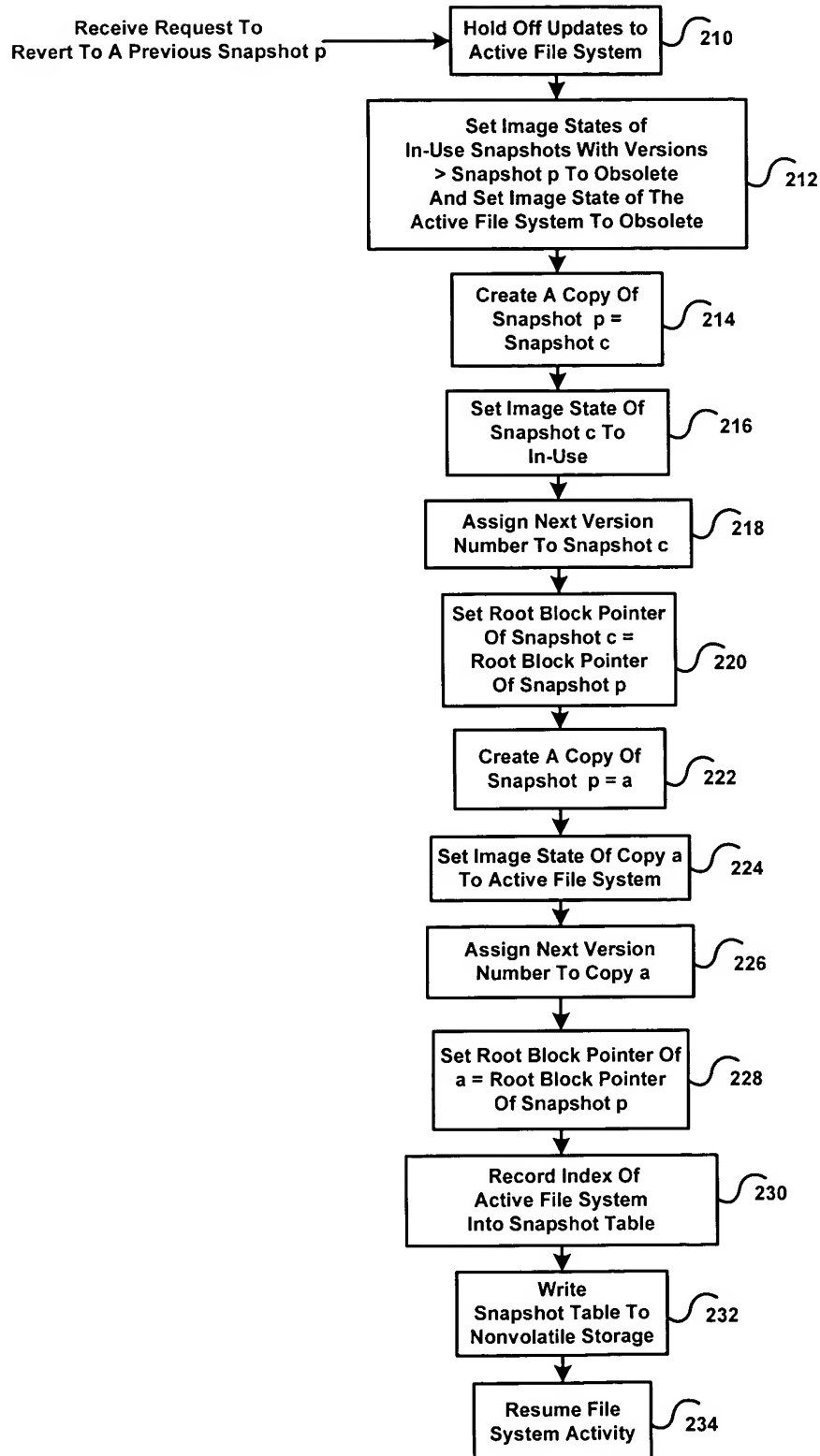


FIGURE 10

### Delete A Snapshot

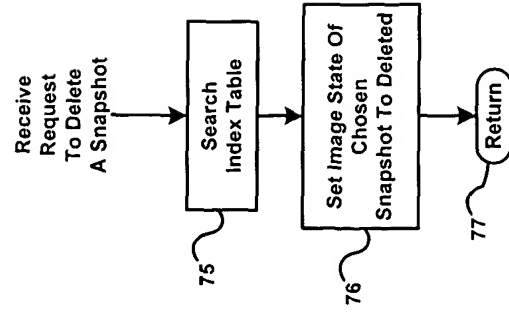


FIGURE 11a

### Detect And Clean Unneeded Snapshots

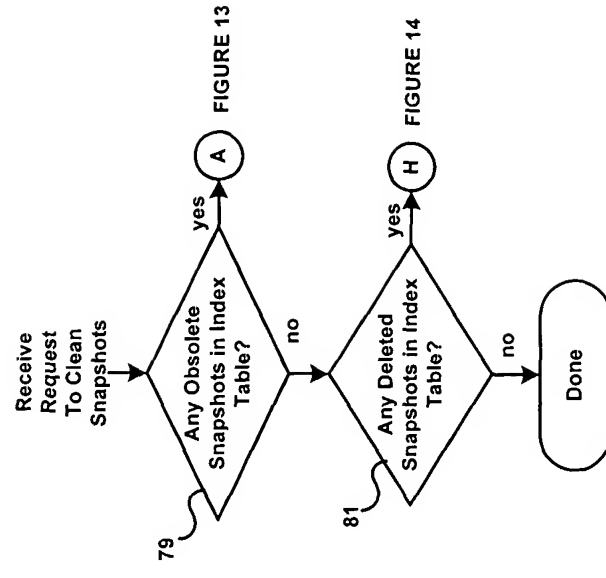
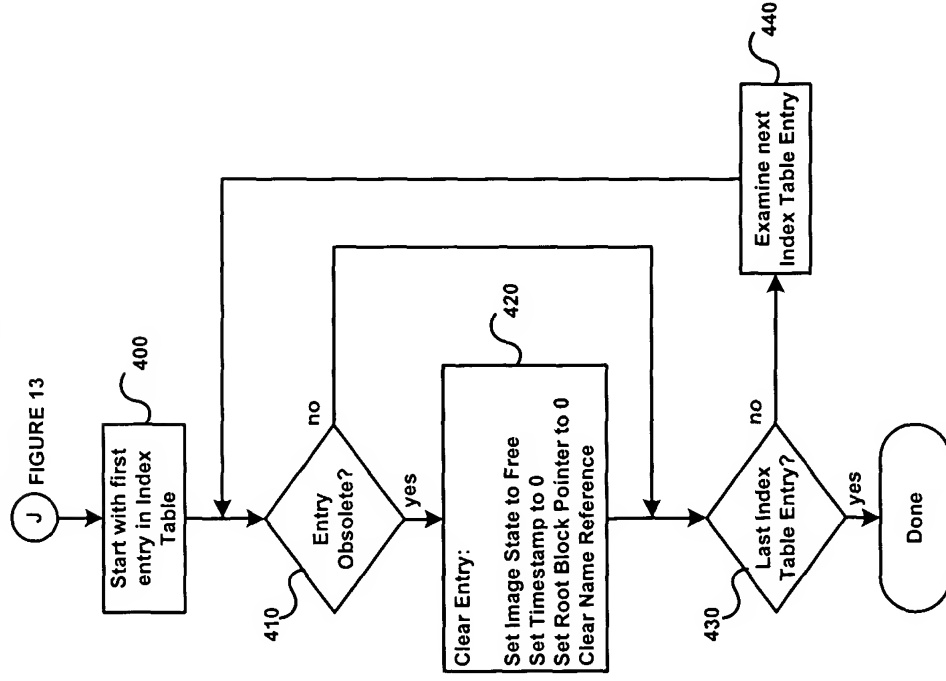


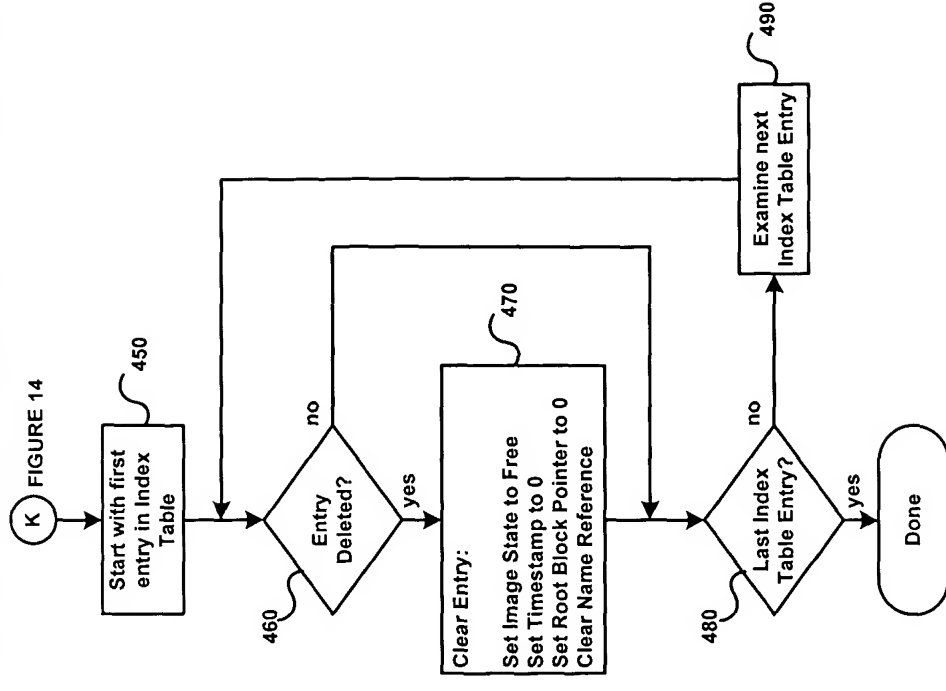
FIGURE 11b

Remove Obsolete Snapshots from Index Table



**FIGURE 12a**

Remove Deleted Snapshots from Index Table



**FIGURE 12b**

## Clean Obsolete Snapshots

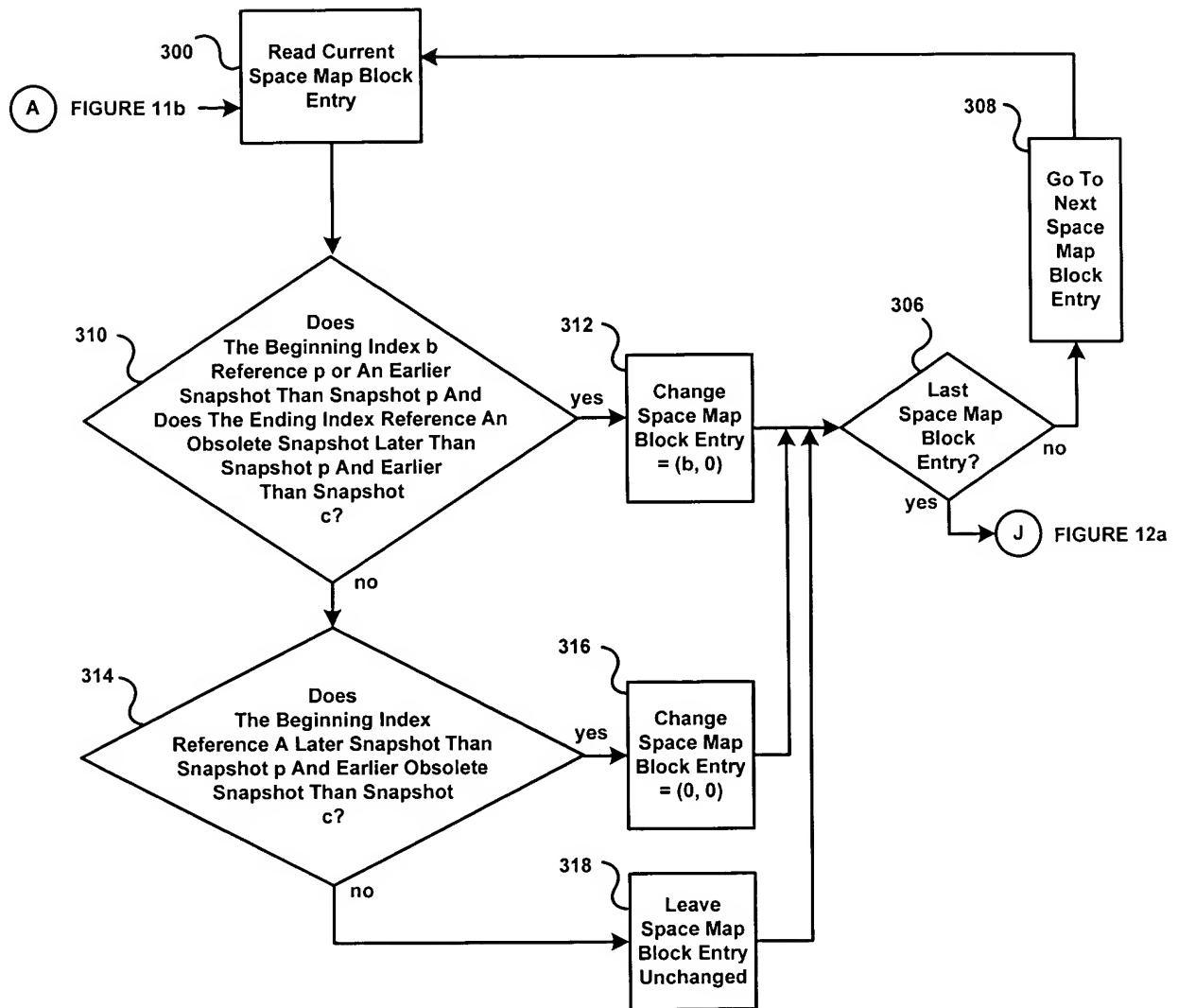


FIGURE 13

## Clean Deleted Snapshots

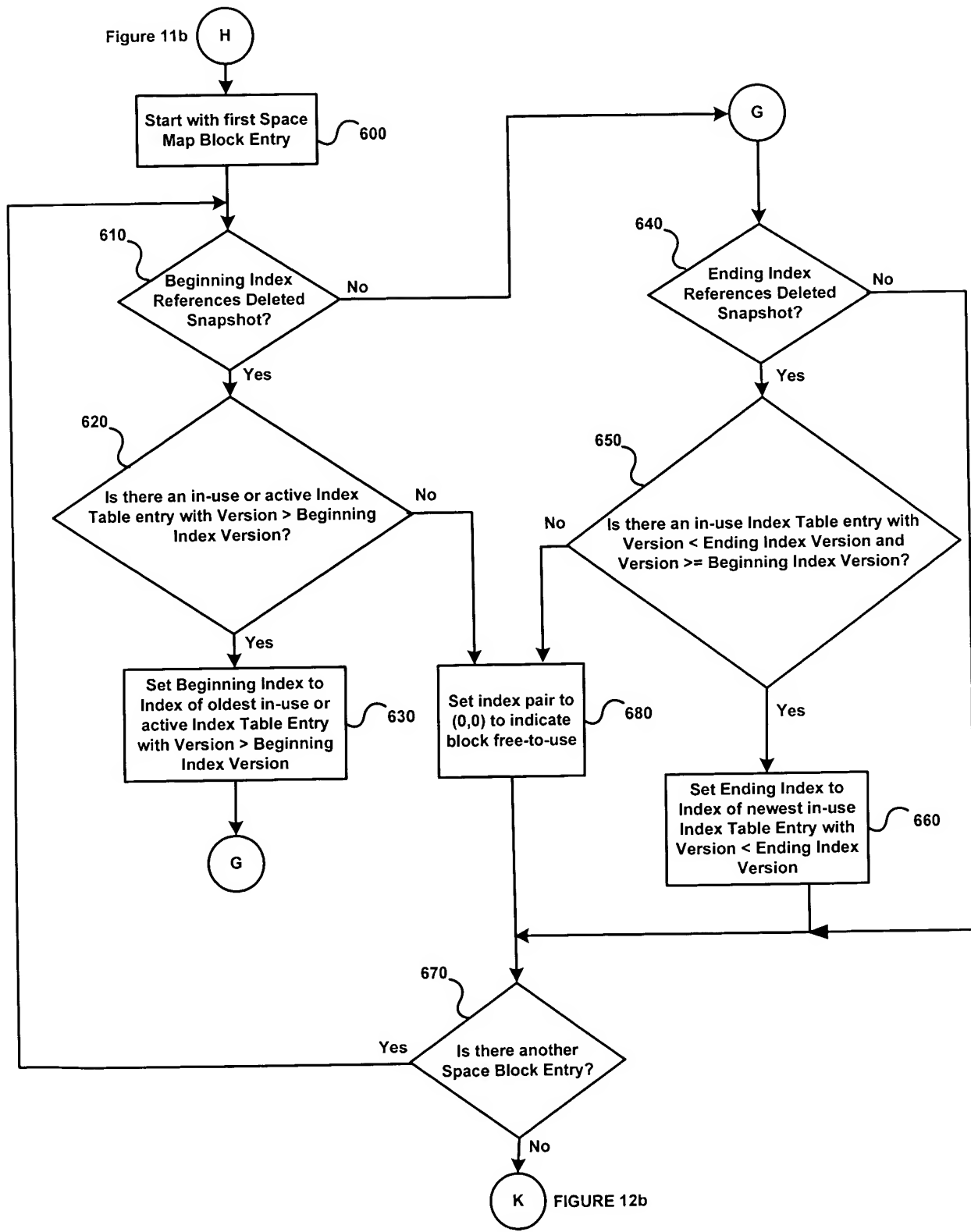


FIGURE 14

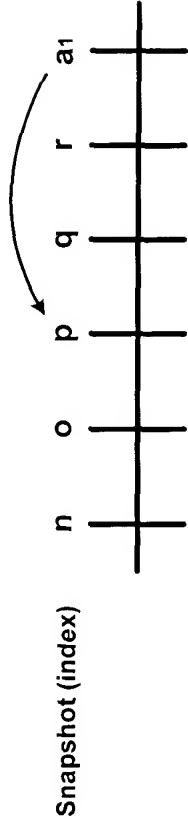


FIGURE 15a

Normal File System Operation  
With In-Use Snapshots

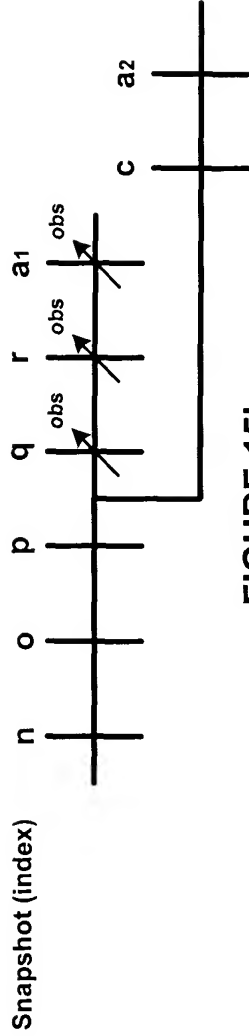


FIGURE 15b

File System Operation On Hold  
Revert To Snapshot "p"  
Obsolete Snapshot Process  
(Clean Later In Background Process)

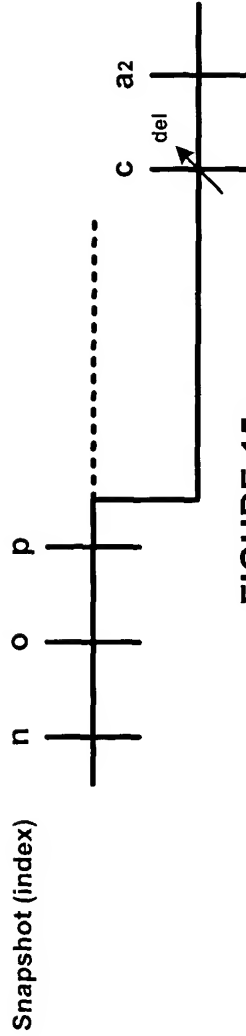


FIGURE 15c

Normal File System Operation  
Cleaned Of Obsolete Snapshots  
Delete Snapshot Process  
(Clean Later In Background Process)

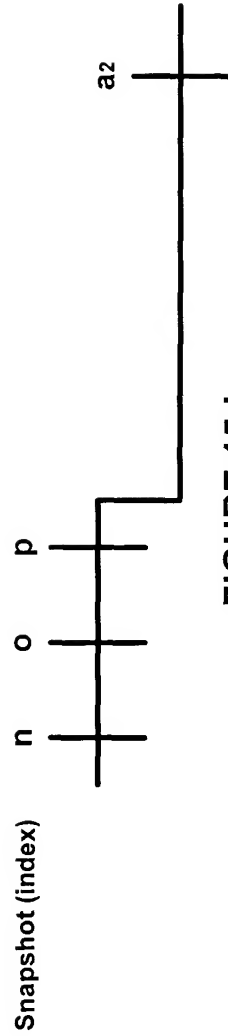
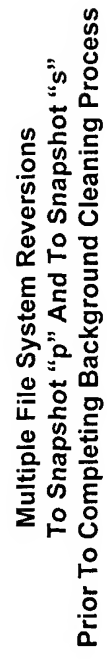


FIGURE 15d

Normal File System Operation  
Cleaned Of Deleted Copy Snapshot



**FIGURE 16**